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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,331	04/01/2004	Ray C. Minor	P69605US0	5342

136 7590 02/28/2006
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EXAMINER

BURCH, MELODY M

ART UNIT PAPER NUMBER

3683

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/814,331

Applicant(s)

MINOR, RAY C.

Examiner

Melody M. Burch

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 February 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/8/06 has been entered.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitation of permitting rolling movement in any direction of the spherical balls over a distance exceeding the radius of the spherical balls as recited in claim 34 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency.

Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 33-50 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Re: claim 33. The phrase "a vertical stationary pole" in line 2 lacks support in the originally filed specification. The pole is not stationary because it is subjected to movement in the form of vibrations.

Re: claim 34. The originally filed specification lacks support for the limitation of permitting rolling movement in any direction of the spherical balls over a distance exceeding the radius of the spherical balls. Examiner refers Applicant to chamber 50' in

figure 16. The spherical ball 48' cannot roll to the right over a distance exceeding the radius of the ball because of the presence of planar panel 28'.

Re: claim 44. The originally filed specification lacks support for the added limitation of the weight receiving chambers being solely occupied by ambient air as recited in line 4 of claim 44. The remaining claims are rejected due to their dependency from one of claims 33 and 44.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 33, 34, 35, 36, 37, 38, 41-47, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5724862 to Hannah et al. in view of US Patent 4433592 to Tatsumi et al.

Re: claims 33, 37, and 38. Hannah et al. show in figure 8A pole a vibration damping assembly mountable on a pole 32 capable of damping wind induced first harmonic mode pole vibrations, said assembly comprising an annular housing including a first housing component half-portion 90 and a second housing component half-portion 91 and connections 92, 93 connecting the first housing component half-portion to the second housing component half-portion, each housing component half-portion including an inner partial cylinder having an inner partial cylinder sleeve surface as labeled in the

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drawing on the following page having a lower portion, a center of curvature and being dimensioned and shaped to fit in a mating manner over, and in facing contact with, an upper end portion of a pole having an axis approximately coextensive with the center of curvature of the pole as shown, an outer partial cylinder sleeve positioned outwardly of the inner partial cylinder sleeve surface and having a lower end portion and a center of curvature that is coextensive with the center of curvature of the inner partial cylinder sleeve surface as shown, a floor panel shown below the balls extending between lower portions of the inner partial cylinder sleeve surface and the outer partial cylinder sleeve, a plurality of partitioning panels shown radially between the balls extending vertically upwardly from the floor panel and extending between the inner partial cylinder sleeve and the outer partial cylinder sleeve to define damping weight receiving chambers between adjacent partitioning panels and a movable damping weight or balls in each of the damping weight receiving chambers as shown.

Hannah et al. show some of the partitioning panels, but fail to show the damping weight receiving chambers being non-circular.

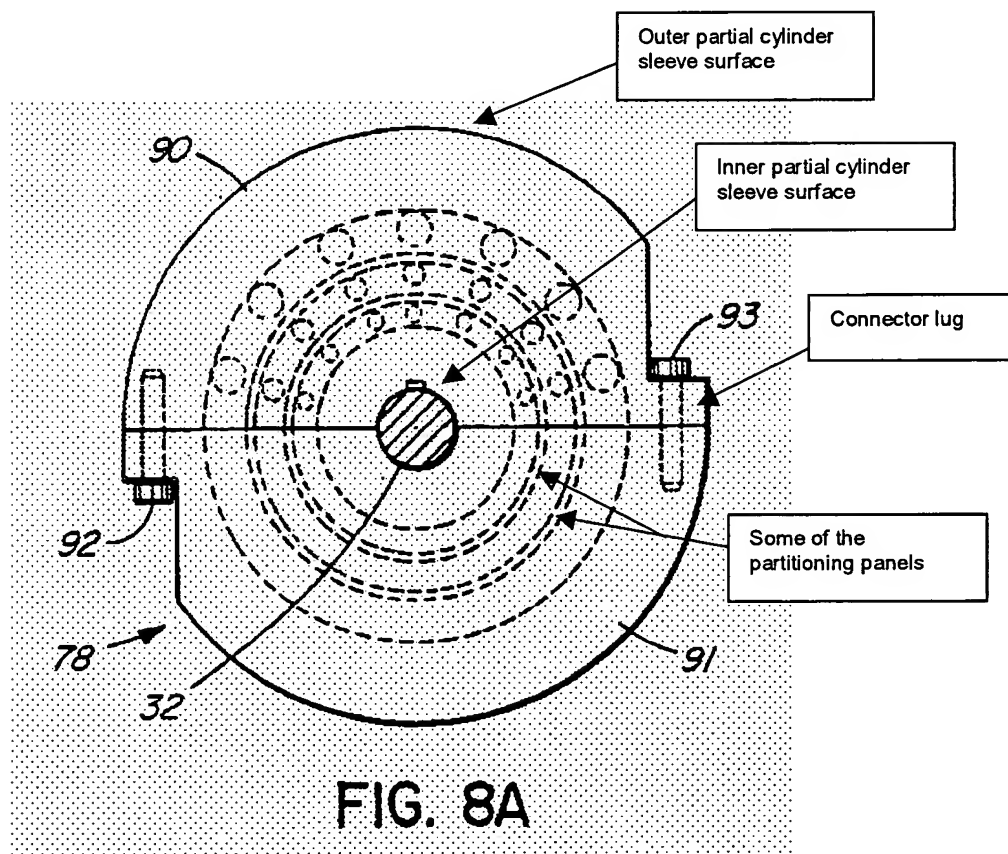
Tatsumi et al. teach in figure 7 the use of a circular damping weight receiving chamber 58 being divided by additional partitioning panels 64,66 to form non-circular damping weight receiving chambers shown in the area of the lead lines of 58 and 65.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the circular chambers of Hannah et al. to have included additional planar panels, as taught by Tatsumi et al., in order to provide a means of allowing different damping capacities depending on the rotational speed of the

apparatus. Examiner notes that the additional panels extend vertically upward from the floor panel by way of the circular panels.

Re: claim 34. Hannah et al., as modified, describe the invention substantially as set forth above, but lacks the specific dimension requirements of the damping weight receiving chamber.

In *In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955) the court held that "limitations relating to size...were not sufficient to patentably distinguish over the prior art."



Re: claims 44, 45, and 50. Hannah et al., as modified, show in figure 8a a vibration reducing device mountable on a pole 32 capable of damping wind induced first harmonic mode vibrations comprising a housing mountable on a pole and including an annular array of dry weight receiving chambers or annular areas in which the balls are located shaped and dimensioned to encircle and effect mounting of the device on a pole, a damping weight or spherical balls in each dry weight receiving chamber and, wherein, the dry weight receiving chambers are separated by structure or partitioning panels as shown preventing movement of the damping weights from one dry weight receiving chamber to an adjacent dry weight receiving chamber.

Re: claims 35, 36, 46, and 47. Hannah et al., as modified, are silent with regards to the specific material of the balls. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the balls to have been metal or specifically lead since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Re: claims 41-43. Hannah et al., as modified, show in figure 8A wherein the first housing component half-portion and the second housing component half-portion are fixedly connected together to cooperatively encircle the cylindrical pole, each housing component half portion includes a first planar plate extending between a first end portion of the inner partial cylinder sleeve and a connector lug labeled in the labeled version of figure 8A found earlier in the office action comprising part of the connection on a first end portion of the outer partial cylinder sleeve, and a second planar panel

extending between a second end portion of the inner partial cylinder sleeve and a connector lug as labeled comprising part of the connection on a second end portion of the outer partial cylinder sleeve and threaded screws comprising part of the connection connecting the connector lug of the second housing component half portion to provide a rigid housing structure.

Hannah et al. lack the limitation of the planar plates.

Tatsumi et al. teach in figure 7 the use of a circular damping weight receiving chamber 58 being divided by additional planar partitioning panels 64,66 to form non-circular damping weight receiving chambers shown in the area of the lead lines of 58 and 65.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the circular chambers of Hannah et al. to have included additional planar panels, as taught by Tatsumi et al., in order to provide a means of allowing different damping capacities depending on the rotational speed of the apparatus. Examiner notes that the additional panels extend vertically upward from the floor panel by way of the circular panels.

Hannah et al., as modified, lack the limitation of the screws and the damping weights being specifically made of metal or the damping weights being made of lead.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the material of the screws and damping weights to have been metal or in the case of the damping weights to have been lead since it has been held to be within the general skill of a worker in the art to select a known material

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on the basis of its suitability for the intended use as a matter of obvious design choice.

In re Leshin, 125 USPQ 416.

7. Claims 39, 40, 48, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5724862 to Hannah et al. in view of US Patent 4433592 to Tatsumi et al. as applied above and further in view of US Patent 4655317 to Koyla et al.

Re: claims 39 and 48. Hannah et al., as modified, describe the invention substantially as set forth above, including the limitation of the damping weights being spherical balls, but are silent as to the damping weights metal balls and being plastic coated.

Kolya et al. teach in col. 3 line 68 - col. 4 line 5 the limitation of a spherical body being coated with plastic.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the spherical balls of Hannah et al., as modified, to have been coated with plastic, as taught by Kolya et al., in order to provide a means of insulating sound.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the balls to have been metal or specifically lead since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Re: claims 40 and 49. Hannah et al., as modified, lack the limitation of the damping weights being metal or that they are coated with polyurethane.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the material of the balls to have been metal since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Kolya et al. teach in col. 3 line 68 - col. 4 line 5 the limitation of a spherical body being coated with polyurethane.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the spherical balls of Hannah et al., as modified, to have been coated with polyurethane, as taught by Kolya et al., in order to provide a means of insulating sound.

Response to Arguments

8. Applicant's arguments with respect to claims rejected by the Riehl reference have been considered but are moot in view of the new ground(s) of rejection.

9. Applicant's arguments filed 2/8/06 have been fully considered but they are not persuasive. Applicant argues that Hannah et al. is not concerned with, or capable of, damping wind vibrations. Examiner maintains that an apparatus including races or chambers that carry a plurality of balls not only functions to counteract imbalance forces, but also serves to damp vibrations as discussed in Hannah et al. col. 1 lines 44-49. Accordingly, since the device disclosed by Hannah is arranged in such a way as to damp vibrations due to the presence of races and balls, it is at least capable of damping

vibrations caused by wind. Applicant further argues that Hannah et al. show a horizontal shaft and that the claims call for a vertical pole. Examiner notes that "vertical" and "horizontal" are relative terms and that for examining purposes, Examiner has interpreted the shown arrangement to be extending in a vertical direction. The arrangement would be vertical from the point of view of a person standing in the same direction as the direction of extension of the shaft in Hannah. Accordingly, the arguments regarding vertical and horizontal directions are moot.

With regards to the Koyla et al. reference, Applicant argues that Koyla is unrelated and completely remote art. In response to applicant's argument that Koyla is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Koyla is reasonably pertinent to the particular problem with which the Applicant is concerned. Particularly, Koyla is concerned with providing a coating on balls to insulate sound, a form of vibration, similar to the way in which Applicant is concerned with coating balls to damp wind vibration. Applicant also argues that Koyla does not teach a full sphere. Examiner maintains that the base reference teaches the sphere and that Koyla is used for the teaching of the coating.

With regards to the argument that Hannah et al. fails to disclose a pole vibration damping assembly mountable on a vertical stationary pole, Examiner notes that the damping assembly of Hannah et al. is mounted on a vertical stationary pole when the

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pole is not rotating the same way in which the damping assembly of the instant application is mounted on a vertical stationary pole when the pole is not subjected to vibrations, as best understood by Examiner. See the 112 Rejections in paragraph 3 of this Office action.

With respect to the arguments regarding the use of *In re Leshin*, Examiner notes that the case law teaches that it is within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In other words, one of ordinary skill in the pole vibration damping assembly art would have known to choose the claimed materials to achieve certain damping capacities depending on the particular application. Since Applicant has failed to provide an explanation of criticality regarding the use of the specifically claimed materials, Examiner maintains that the reliance upon legal precedent is proper.

Accordingly, the rejections have been maintained.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 571-272-7114. The examiner can normally be reached on Monday-Friday (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan can be reached on 571-272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mmb
February 18, 2006

Melody M. Burch
Melody Burch
Primary Examiner
2/18/06